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THE COUNCIL OF THE CITY OF LONGMONT, COLORADO, ORDAINS:

Chapter 16.22 of the Longmont Municipal Code is hereby repealed and reenacted to read as follows:

Pursuant to Part 2 of Article 16 of Title 31, CRS, as amended, and Article IV, Municipal Charter of the City of Longmont, Colorado, there is adopted as the energy code of the City, by reference thereto, the International Energy Conservation Code, 2012 Edition, published by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, IL 60478, that code to have the same force and effect as if set forth in this chapter in every particular, save and except such portions as are added, amended, deleted, or replaced in this chapter. All references in this code to the International Energy Conservation Code are to the edition referenced above.

At the time of adoption, one certified true copy of the International Energy Conservation Code, published by the International Code Council is on file in the office of the city clerk and may be inspected by any interested person between the hours of eight a.m. and five p.m., Monday through Friday, holidays excepted. The city shall keep a copy of the adopted code in the office of the chief enforcement officer for public inspection. The building code, as finally adopted, is available for sale at the office of the city clerk, at a price reflecting cost to the city as established by the city manager, pursuant to this municipal code.

International Energy Conservation Code is amended by insertion of “the City of Longmont” in the brackets.

1 16.22.040 Section C101.5.2 amended—Low energy buildings

2 Section C101.5.2 of the International Energy Conservation Code is
3 amended by adding the following exception:

4 3. Seasonal buildings.

5 16.22.050 Section C103.3.1 amended Approval of construction documents

6 Section C103.3.1 of the International Energy Conservation Code is
7 amended by replacing the first sentence to read as follows:

8 When the building official issues a permit, the construction documents
9 shall be approved, in writing or by a stamp which states “APPROVED AS
10 NOTED.”

11 16.22.060 Section C202 addition--Definitions

12 Section C202 of the International Energy Conservation Code is amended
13 by the addition of the following:

14 **CONDITIONED SPACE:** For energy purposes, space within a building
15 that is provided with heating and/or cooling equipment or systems capable of
16 maintaining, through design or heat loss/gain, 50 degrees Fahrenheit during the
17 heating season and 85 degrees Fahrenheit during the cooling season, or
18 communicates directly with a conditioned space. For mechanical purposes, an
19 area, room or space being heated or cooled by any equipment or approved heating
20 appliance.

21 **UNUSUALLY TIGHT CONSTRUCTION:** Construction meeting the
22 following requirements:

23 In buildings of unusually tight construction, combustion air shall be
24 obtained from outside the sealed thermal envelope. In buildings of ordinary
25 tightness, insofar as infiltration is concerned, all or a portion of the combustion air
26 for fuel-burning appliances may be obtained from infiltration when the room or
27 space has a volume of 50 cubic feet per 1,000 Btu/h input. Buildings classified as
28 Group R occupancies, constructed with permits issued on or after March 1, 1989,
29 are classified as buildings with unusually tight construction.

1 16.22.070 Section C302.1 amended--Design conditions

2 Section C302.1 of the International Energy Conservation Code is amended
3 by the addition of the following:

4 The residential design parameters shall be -2 degrees Fahrenheit heating
5 design and 91 degrees Fahrenheit cooling design.

6 16.22.080 Section C402.2 amended—Table C402.2

7 Table C402.2 of the International Energy Conservation Code is amended
8 by the addition of footnote f stating the following:

9 f. Re-roofing of existing buildings requiring insulation be installed per
10 Section C101.4.3 item 5 may be allowed to install an insulation value of R-30
11 above the roof deck.

12 16.22.090 Section C403.2.1 amended—Calculation of heating and cooling loads

13 Section C403.2.1 of the International Energy Conservation Code is
14 amended by the addition of the following:

15 Residential dwelling unit heating and cooling equipment shall be sized in
16 accordance with ACCA Manual S based on building loads calculated in
17 accordance with ACCA Manual J or other approved heating and cooling
18 calculation methodologies and any duct systems serving that equipment shall be
19 installed in accordance with ACCA Manual D.

20 16.22.100 Section C403.2.9 amended—Mechanical systems commissioning and
21 completion requirements.

22 Section C403.2.9 of the International Energy Conservation Code is amended by
23 the deletion of the first sentence and insert the following:

24 Mechanical systems shall be completed in accordance with Sections C408.2.2
25 through C408.2.3.3.

26 16.22.110 Section C404.1 amended—Service water heating . General

27 Section C404.1 of the International Energy Conservation Code is amended
28 by the addition of Section 404.1.1 Service water heating.

29 The minimum Energy Factor for residential dwelling unit water heaters
30 shall be .64 for fuel fired and .98 for electric water heaters.

31 16.22.120 Section C404.5 amended—Pipe insulation

1 Section C404.5 of the International Energy Conservation Code is amended by the
2 deletion of the entire section and insert the following:

3 For automatic-circulating hot water and heat-traced systems, piping shall be
4 insulated with not less than 1 inch of insulation. The first 8 feet of piping in non-hot-
5 water-supply temperature maintenance systems served by equipment without integral
6 heat traps shall be insulated with 0.5 inch of material.

7 Exception: Heat-traced piping systems shall meet the manufacturer's installation
8 instructions. Untraced piping within a heat traced system shall be insulated with not less
9 than 1 inch of insulation.

10 16.22.130 Section C404.7.3 amended—Covers

11 Section C404.7.3 of the International Energy Conservation Code is amended by
12 the deletion of sentence one and insert the following:

13 Heated pools and inground permanently installed spas heated to 90 degrees
14 Fahrenheit or higher shall be provided with a vapor-retardant cover.

15 16.22.140 Section C405.1 amended—Electrical power and lighting systems

16 Section C405.1 of the International Energy Conservation Code is amended by the
17 addition of the following after sentence one:

18 Functional testing shall be in accordance with Section C408.3.

19 16.22.150 Section C408 amended—System commissioning

20 Section C408 of the International Energy Conservation Code is amended by the
21 deletion of Sections C408.1, C408.2, C408.2.1, C408.2.4, C408.2.4.1, C408.2.4.2,
22 C408.2.5, C408.2.5.1, C408.2.5.2, C408.2.5.3 and C408.2.5.4.

23 16.22.160 Section C408.3 amended—Lighting system functional testing

24 Section C408.3.1 of the International Energy Conservation Code is amended by
25 the deletion of sentence two.

26 16.22.170 Section R101.1 amended--Title

27 International Energy Conservation Code is amended by insertion of "the City of
28 Longmont" in the brackets.

29 16.22.180 Section R103.3.1 amended Approval of construction documents

30 Section R103.3.1 of the International Energy Conservation Code is
31 amended by replacing the first sentence to read as follows:

1 When the building official issues a permit, the construction documents
2 shall be approved, in writing or by a stamp which states “APPROVED AS
3 NOTED.”

4 16.22.190 Section R202 addition--Definitions

5 Section R202 of the International Energy Conservation Code is amended
6 by the addition of the following:

7 BEDROOM/SLEEPING ROOM: An enclosed space within a dwelling
8 unit, used or intended to be used for sleeping purposes, meeting the minimum
9 area requirements of the building code or containing a closet or similar area which
10 is easily converted into a closet (such space needs only doors to become a closet).

11 CONDITIONED SPACE: For energy purposes, space within a building
12 that is provided with heating and/or cooling equipment or systems capable of
13 maintaining, through design or heat loss/gain, 50 degrees Fahrenheit during the
14 heating season and 85 degrees Fahrenheit during the cooling season, or
15 communicates directly with a conditioned space. For mechanical purposes, an
16 area, room or space being heated or cooled by any equipment or approved heating
17 appliance.

18 UNUSUALLY TIGHT CONSTRUCTION: Construction meeting the
19 following requirements:

20 In buildings of unusually tight construction, combustion air shall be
21 obtained from outside the sealed thermal envelope. In buildings of ordinary
22 tightness, insofar as infiltration is concerned, all or a portion of the combustion air
23 for fuel-burning appliances may be obtained from infiltration when the room or
24 space has a volume of 50 cubic feet per 1,000 Btu/h input. Buildings classified as
25 Group R occupancies, constructed with permits issued on or after March 1, 1989,
26 are classified as buildings with unusually tight construction.

27 16.22.200 Section C302.1 amended--Design conditions

28 Section R302.1 of the International Energy Conservation Code is amended
29 by the addition of the following:

30 The residential design parameters shall be -2 degrees Fahrenheit heating
31 design and 91 degrees Fahrenheit cooling design.

1 16.22.210 Section R401.1 amended—Scope

2 Section R401.1 of the International Energy Conservation Code is amended
3 by the addition of Section 401.1.1 Service water heating.

4 The minimum Energy Factor for residential dwelling unit water heaters
5 shall be .64 for fuel fired and .98 for electric water heaters.

6 16.22.220 Section R401.3 amended--Certificate

7 Section R401.3 of the International Energy Conservation Code is amended
8 by replacing the first two sentences with the following:

9 A permanent certificate shall be posted in a conspicuous location on the
10 job site.

11 16.22.230 Section R402.4.1 amended—Building thermal envelope

12 Section R402.4.1 of the International Energy Conservation Code is amended by
13 replacing the first two sentences with the following:

14 The building thermal envelope shall comply with Section R402.4.1.1. The
15 building thermal envelope shall be durably sealed to limit infiltration. The sealing
16 methods between dissimilar materials shall allow for differential expansion and
17 contraction. The following shall be caulked, gasketed, weatherstripped or otherwise
18 sealed with an air barrier material, suitable film or solid material:

- 19 1. All joints, seams and penetrations
- 20 2. Site-built windows, doors and skylights
- 21 3. Openings between window and door assemblies and their respective jambs and
22 framing
- 23 4. Utility penetrations
- 24 5. Dropped ceilings or chases adjacent to the thermal envelope
- 25 6. Knee walls
- 26 7. Walls and ceilings separating a garage from conditioned space
- 27 8. Behind tubs and showers on exterior walls
- 28 9. Common walls between dwelling units
- 29 10. Attic access openings
- 30 11. Rim joist junction
- 31 12. All other sources of infiltration

1 16.22.240 Section R402.4.1.1 amended—Installation

2 Section R402.4.1.1 of the International Energy Conservation Code is
3 amended by the deletion of sentence two and insert the following:

4 Where required by the code official, an approved third party shall inspect
5 all components and verify compliance in accordance with Section R402.4.1.2.

6 16.06.250 Section R402.4.1.2 amended—Testing

7 Section R402.4.1.2 of the International Energy Conservation Code is
8 amended by changing the 3 air changes per hour in zones 3 through 8 in sentence
9 one to 5.

10 16.22.260 Section R403.5 amended—Mechanical ventilation

11 Section R403.5 of the International Energy Conservation Code is amended by the
12 addition of the following exception:

13 Exception: Combustion air intake for natural draft vented water heaters.

14 16.22.270 Section R403.9.3 amended—Covers

15 Section R403.9.3 of the International Energy Conservation Code is amended by
16 the deletion of sentence one and insert the following:

17 Heated pools and inground permanently installed spas heated to 90 degrees
18 Fahrenheit or higher shall be provided with a vapor-retardant cover.

19